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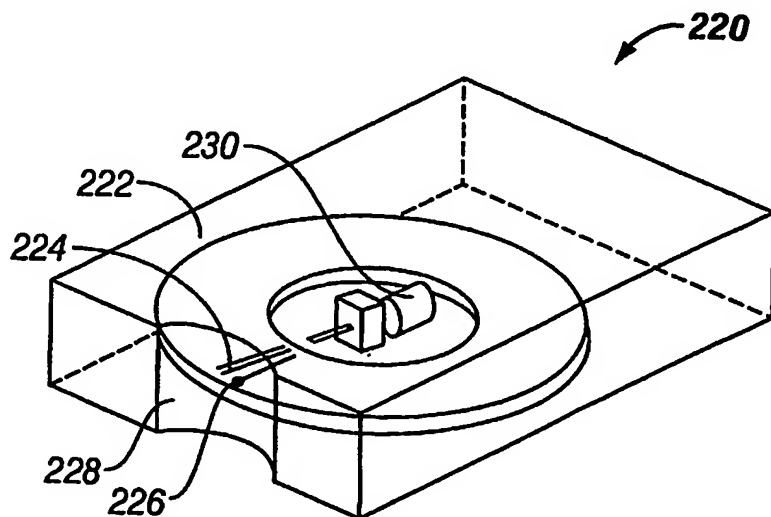
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(54) Title: METHOD AND APPARATUS FOR BODY FLUID SAMPLING AND ANALYTE SENSING



(57) Abstract: A method of controlling a penetrating member is provided. The method comprises providing a lancing device comprising a penetrating member driver having a position sensor and a processor that can determine the relative position and velocity of the penetrating member based on measuring relative position of the penetrating member with respect to time; providing a predetermined velocity control trajectory based on a model of the driver and a model of tissue to be contacted. In some embodiments, a feedforward control to maintain penetrating member velocity along said trajectory.

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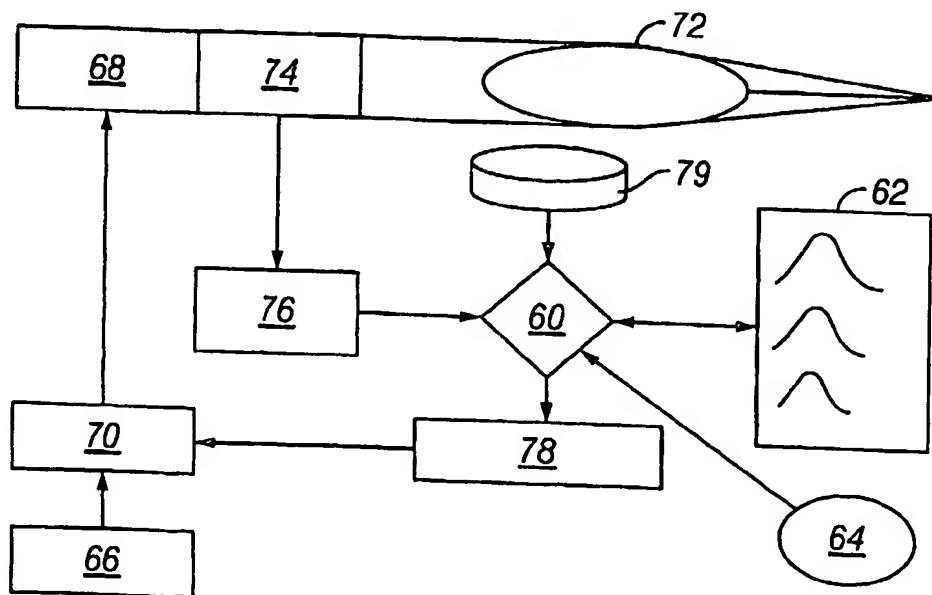
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(54) Title: METHOD AND APPARATUS FOR BODY FLUID SAMPLING AND ANALYTE SENSING



(57) Abstract: The method comprises providing a lancing device comprising a penetrating member (68) driver having a position sensor (74) and a processor (60) that can determine the relative position and velocity of the penetrating member (18,72) based on measuring relative position of the penetrating member with respect to time; providing a predetermined velocity control trajectory based on a model of the driver (68) and a model of tissue to be contacted. Furthermore, a feedforward control is able to maintain penetrating member velocity along the trajectory.



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